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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,683	09/08/2003	Joerg Singler	13913-117001 / 2003P00254	2129
32864 7590 03/07/2007 FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER VERDI, KIMBLEANN C	
			ART UNIT	PAPER NUMBER
			2109	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/658,683

Applicant(s)

SINGLER ET AL.

Examiner

Kacy Verdi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This office action is in response to the Application filed on September 8, 2003. Claims 1-20 are pending in the current application.

#### ***Oath/Declaration***

1. It does not identify the citizenship of each inventor. Citizenship for Joerg Singler is not identified on the Declaration.

#### ***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 7 refers to selecting an adapter from the multiple adapters that is operable to make use of the greatest set of the multiple client capabilities, however the specification does not disclose the criteria for determining the greatest set of the multiple client capabilities.

#### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claims 1-12, a "computer program product" is being recited; however, it appears that a computer program product would reasonably be interpreted by one of ordinary skill in the art as software, per se. The computer program product as claimed does not set forth a practical application of the invention or produce a

tangible result. As such, it is believed that the computer program product of claims 1-12 is reasonably interpreted as functional descriptive material, per se.

With respect to claims 1-12, an "information carrier," in accordance with Applicant's specification, may be an electromagnetic signal. This subject matter is not limited to that which falls within a statutory category of invention because it is not limited to a process, machine, manufacture, or a composition of matter. Instead, it includes a form of energy. Energy does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7, 9-11, 13-14, and 16-19 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,003,773 to Hoennig et al. (hereinafter Hoennig) in view of U.S. Patent 6,300,947 B1 to Kanevsky.

6. As to claims 1, 13, 16, and 18, Hoennig teaches the invention substantially as claimed including a computer program product, system, method, and apparatus comprising:

a server operable to run an application (server data processing device, col. 7, lines 59-63);

a plurality of client-specific adapters, each adapter in the plurality enabling communication between the application on the server and a client (Interface

Adapter Library 155, Fig. 1); and

a client abstraction layer operable to (Interface Adapter 202, Fig. 2):

identifying one or more selection data elements in a client request, where each selection data element specifies an adapter type, a client type (step 304, Fig. 3, col. 14, lines 52-59); and

selecting an adapter to communicate with the client based on the selection data elements (step 307, Fig. 3, col. 15, lines 1-5).

Although Hoennig teaches the invention substantially, Hoennig does not specifically disclose where each selection data element specifies data describing the client.

However Kanevsky teaches where each selection data element specifies data describing the client (User Request 300d, Fig. 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Hoennig to include the feature of where each selection data element specifies data describing the client (User Request 300d, Fig. 4).as taught by Kanevsky because this provides a different viewing-access strategy for such visual devices varying, for example, from standard PC monitors, laptop screens and palmtops to webphone and digital camera displays,

to any device, with a display, capable of web browsing, and from large windows to small windows (col. 1, lines 60-65, of Kanevsky).

7. As to claims 2, 14, 17, and 19 Hoennig as modified by Kavensky teaches the product, system, method, and apparatus of claims 1, 13, 16, and 18, wherein selecting an adapter comprises:

- performing a multi-stage selection process to select an adapter (determining module performs selection process 122, Fig. 1, col. 11, lines 11-13 of Hoennig), the multi-stage selection process comprising:

- performing an adapter-request process for selecting an adapter (determining module 122, Fig. 1, col. 11, lines 11-13 of Hoennig) based on the selection data elements that specify the adapter type (specification of request interface, col. 14, lines 38-39 of Hoennig);

- if the adapter-request process fails to select an adapter, performing a client-identification process for selecting an adapter (determining module 122, Fig. 1, col. 11, lines 11-13 of Hoennig) based on the selection data elements that specify the client type (unique identifier assigned to request interface, col. 14, lines 39-41 of Hoennig); and

- if the client-identification process fails to select an adapter, performing a client-description process for selecting an adapter (determining module 122, Fig. 1, col. 11, lines 11-13 of Hoennig) based on the selection data elements that specify data describing the client (User Request 300d, Fig. 4 of Kavensky).

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8. As to claim 3, Hoennig as modified by Kavensky teaches the product of claim 1, wherein the selected adapter makes use of a client capability particular to the client (Search Module 205, Fig. 2, col. 9, lines 7-14 of Kavensky).

9. As to claim 4, Hoennig as modified by Kavensky teaches the product of claim 3, wherein the client capability comprises the capability to execute instructions in a scripting language (URL/CGI scripts, col. 8, lines 16-19 of Kavensky).

10. As to claim 5, Hoennig as modified by Kavensky teaches the product of claim 1, wherein the operation to select an adapter comprises:

identifying multiple adapters suitable for communicating with the client (Adapter Manager Determining Module 122, Fig. 1, col. 11, lines 4-10 of Hoennig); and

selecting an adapter from the multiple adapters that makes use of a particular client capability (Adapter Manager Determining Module 122, Fig. 1, col. 11, lines 10-20 of Hoennig).

11. As to claim 6, Hoennig as modified by Kavensky teaches the product of claim 1, wherein the operation to select an adapter comprises:

identifying multiple adapters suitable for communicating with the client (Adapter Manager Determining Module 122, Fig. 1, col. 11, lines 4-10 of Hoennig); and

selecting an adapter from the multiple adapters that requires the least communication with the client (requiring interface directly available at service object, col. 11, lines 10-15 of Hoennig).

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12. As to claim 7, Hoennig as modified by Kavensky teaches the product of claim 1, wherein the client has multiple client capabilities, and wherein the operation to select an adapter comprises:

identifying multiple adapters suitable for communicating with the client (Adapter Manager Determining Module 122, Fig. 1, col. 11, lines 4-10 of Hoennig); and

selecting an adapter from the multiple adapters that is operable to make use of the greatest set of the multiple client capabilities (step 602, Fig. 6 of Hoennig).

13. As to claim 9, Hoennig as modified by Kavensky teaches the product of claim 2, wherein the client-description process comprises:

using the specification of data describing the client to identify a client capability (Search Module parses User Request, col. 8, lines 65-67 and col. 9, lines 1 of Kavensky); and

wherein the adapter selected to communicate with the client conforms to the client capability (Search Module 205, Fig. 2, col. 9, lines 7-14 of Kavensky).

14. As to claim 10, Hoennig as modified by Kavensky teaches the product of claim 9, wherein the client capability is a screen size (user request 300d, Fig. 4 of Kavensky).

15. As to claim 11, Hoennig as modified by Kavensky teaches the product of claim 2, wherein the client-identification process comprises looking up the specification of the client type in a table (Select from library, step 602, Fig. 6 of Hoennig).

16. Claims 8, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,003,773 to Hoennig et al. (hereinafter Hoennig) in view of U.S.



Patent 6,300,947 B1 to Kanevsky as applied to claims 1, 13, and 18 above, and further in view of U.S. Patent Application 2001/0047383 A1 to Dutta.

17. As to claims 8, 15, and 20 Hoennig as modified by Kanevsky does not teach the product, system, and apparatus of claims 1, 13, and 18, wherein the adapter is selected from a plurality of adapters stored on a server, the plurality of adapters including one or more of a mobile adapter for a client that comprises a mobile device, an HTML adapter for a client that supports HTML, an XML adapter for a client that supports XML, an RMI adapter for a client that supports RMI, and a JavaScript adapter for a client that supports JavaScript.

However Dutta teaches the product, system, and apparatus of claims 1, 13, and 18, wherein the adapter is selected from a plurality of adapters stored on a server, the plurality of adapters including one or more of a mobile adapter for a client that comprises a mobile device (embedded device, paragraph [003]), an HTML adapter for a client that supports HTML, an XML adapter for a client that supports XML, an RMI adapter for a client that supports RMI, and a JavaScript adapter for a client that supports JavaScript (client interfaces use common communication protocols for client server communication, paragraph [0028]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Hoennig as modified by Kanevsky to include the feature of wherein the adapter is selected from a plurality of adapters stored on a server, the plurality of adapters including one or more of a mobile adapter for a client that comprises a mobile device (embedded device, paragraph [003]), an HTML

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adapter for a client that supports HTML, an XML adapter for a client that supports XML, an RMI adapter for a client that supports RMI, and a JavaScript adapter for a client that supports JavaScript (client interfaces use common communication protocols for client server communication, paragraph [0028]) as taught by Dutta because this provides a system and method with which to communication with legacy systems over the internet (paragraph [0011], of Dutta).

18. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,003,773 to Hoennig et al. (hereinafter Hoennig) in view of U.S. Patent 6,300,947 B1 to Kanevsky as applied to claim 1 above, and further in view of U.S. Patent Application 2003/0033356 A1 to Tran et al. (hereinafter Tran).

19. As to claim 12, Hoennig as modified by Kanevsky does not teach the product of claim 1, wherein the specification of the client type comprises a specification of a browser and version number.

However Tran teaches the product of claim 1, wherein the specification of the client type comprises a specification of a browser and version number (client request parsed by CDM for Browser version, paragraphs [0045] and [0049]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Hoennig as modified by Kanevsky to include the feature of wherein the specification of the client type comprises a specification of a browser and version number (client request parsed by CDM for Browser version, paragraphs [0045] and [0049]) as taught by Tran because this

provides a wireless server with extensibility capabilities to allow wireless clients to be dynamically configured and identified by the wireless server (paragraph [0021] of Tran).

### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,706,429 to Lai et al. discloses A transaction processing system, adapted for use in a computer system having a host computer running applications and user terminals connected to the host computer, determines the transaction attributes for each transaction received by the host computer and dynamically associates a transaction protocol to be used in processing that particular transaction.

U.S. Patent 5,802,306 to Hunt discloses a method implemented in a computer network supports a number of client-server sessions from a protocol stack having a single physical adapter associated.

U.S. Patent 5,999,979 to Vellanki et al. discloses a method in a computer network for automatically detecting a most advantageous protocol for communication by a client computer, said client computer being configured to be coupled to a server computer via a computer network.

U.S. Patent 6,003,094 to Dean discloses a data processing method for a workstation.

U.S. Patent 6,237,041 B1 to Håål et al. discloses a device for and a method of integrating an arrangement of computerized essentially arbitrary client systems by

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permitting communication between the client systems. Each client system has a system-specific structure and processes information in a system-specific native format.

U.S. Patent Application 2002/0133635 A1 to Schechter et al. discloses a method and system for interacting with devices having different capabilities.

"Development of reusable components through the use of adapters," by Chia-Chu Chiang, discloses an adapter in the Adapter Layer of an interconnection protocol model to isolate, encapsulate, and manage a component's interactions outside the component.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kacy Verdi whose telephone number is (571) 270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xiao Wu can be reached on (571) 272-7761. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KV

March 1, 2007



XIAO WU  
SUPERVISORY PATENT EXAMINER